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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,136	08/10/2001	Stanley S. Toncich	UTL 00004	4254

7590 07/31/2002  
Kyocera Wireless Corp.,  
Attn: Patent Department  
10300 Campus Point Drive  
San Diego, CA 92121

EXAMINER
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PHAN, THO GIA

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 07/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/927,136

Applicant(s)

TONCICH, STANLEY S.

Examiner

Tho G. Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-23 is/are rejected.
- 7) ☒ Claim(s) 12, 13, 24 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification and the claims.

### ***Claim Objections***

1. Claim 2 is objected to because of the following informalities:

In claim 2, line 1, "a wherein" should be deleted.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. Claims 15-20 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 15, line 2, the language, "the capacitive element" lacks a proper antecedent basis.

In claim 15, line 3, the language, "the inductive element" lacks a proper antecedent basis.

It is unclear what is "a capacitor" and "an inductor" (see claim 15), and how it relates to "a capacitor" and "an inductor" of claim 1.

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In claim 16, the language, "the capacitive/inductive element" lacks a proper antecedent basis.

In claim 17, the language, "the capacitive/inductive element" lacks a proper antecedent basis.

In claim 18, the language, "the capacitive/inductive element" lacks a proper antecedent basis.

In claim 19, the language, "the capacitive/inductive element" lacks a proper antecedent basis.

In claim 20, line 2, the language, "the capacitive element" lacks a proper antecedent basis.

It is unclear what is "a capacitor" (see claim 20, line 3), and how it relates to "a capacitor" of claim 1.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

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(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 1, 15 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Varadan et al (6,333,719).

Varadan et al in figures 1-5 disclose a communication device comprising a capacitor 13 and an inductor 18 arranged as a matching circuit, the matching circuit having an impedance, a ferro-electric material 10 positioned to adjust a value that is a member of the group consisting of a capacitance value of the capacitor and an inductance value of the inductor, a control line 17 operably connected to the ferro-electric material, a control source 16 electrically connected to the control line, the control source configured to transmit a control signal on the control line and wherein the ferro-electric material responsive to the control signal, adjusts the value to change the impedance of the matching circuit.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 2-11, 14, 16-19 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Varadan et al.

Varadan et al have been discussed above but fail to specifically teach the quality factor of the matching circuit when operated in a certain temperature range and the specific bands of operation as claimed. However, the quality factor of the matching circuit when operated in a certain temperature range and the specific bands of operation would have been obvious in the art. Antennas and their elements are routinely "frequency scaled" and thus claims limitations are obvious design choices of wide bandwidth and matching variation with frequency as of interest.

***Allowable Subject Matter***

7. Claims 12-13 and 24-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

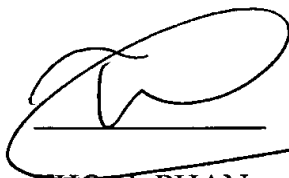
The patents to Paige, Das, Peuzin, Blazej, Das and Babbit et al are cited as of interest and illustrate a similar structure to a tunable ferroelectric assembly.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner THO G. PHAN whose telephone number is (703) 308-3051.

10. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.

11. Papers related to Technology Center 2800 applications **only** may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.

A handwritten signature in black ink, appearing to be 'THO G. PHAN', written over a horizontal line.

THO G. PHAN

Patent Examiner

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July 24, 2002